

WHAT IS CLAIMED IS:

1. A method of requesting operations and management data from a telephony switch at a computing device, said telephony switch and said computing in communication with a packet switched data network, said method comprising:

a. establishing a connection between said computing device and said telephony switch over said packet switched data network;

b. forming at least one packet comprising:

i. a network address identifying said telephony switch on said packet switched network;

ii. a network address identifying said computing device;

iii. a first message type identifier, identifying a message contained at least partially within said packet, as a data request message;

iv. a second message type identifier, identifying a type of operations and management data requested from said telephony switch;

c. forwarding said packet from said computing device to said telephony switch using said data network.

2. The method of claim 1, wherein said packet further comprises a security token allowing said switch to authenticate said computing device as a computing device authorized to request said operations and management data.

3. The method of claim 1, further comprising:

prior to b. exchanging login request and login reply

~~messages between said computing device and said telephony switch, thereby establishing a message exchange session.~~

Sub B2  
4. The method of claim 1, wherein said message comprises an internet protocol compliant network.

Sub 1  
5. The method of claim 4, wherein said connection comprises a TCP/IP connection and said at least one packet is TCP/IP compliant.

6. The method of claim 1, wherein said connection with said switch is established by way of an intermediate computing platform.

7. A method of providing operations and management data from a telephony switch to a computing device, said telephony switch and said computing in communication with a packet switched data network, said method comprising:

a. in response to a request for operations and management data, forming at least one packet comprising:

i. a network address identifying said telephony switch on said packet switched network;

ii. a network address identifying said computing device;

iii. a first message type identifier, identifying said packet as at least partially containing a message formed in response to a request;

iv. a second message type identifier, identifying a type of operations and management data provided by in said packet;

b. forwarding said packet from said telephony switch to

Sub B3  
said computing device using said data network.

8. The method of claim 7, wherein said packet further comprises an alphanumeric identifier of said telephony switch.

Sub C1  
9. The method of claim 7, wherein said packet further comprises a security token allowing said computing device to authenticate said switch as a proper switch responding to a request.

10. The method of claim 7, further comprising,  
prior to a. exchanging login request and login reply messages between said computing device and said telephony switch, thereby establishing a message exchange session.

11. A method of exchanging operations and management data between a telephony switch and a computing device, said telephony switch and said computing in communication with a packet switched data network, said method comprising:  
a. establishing at least first and second network connections between said computing device and said telephony switch over said packet switched data network;  
b. exchanging data having a first priority over said first network connection;  
c. concurrently exchanging data having a second priority over said second network connection.

12. The method of claim 11, wherein said packet switched network adheres to the internet protocol.

13. The method of claim 13 wherein said connections are TCP/IP connections, at first and second defined logical ports at said telephony switch.

14. The method of claim 11, further comprising encapsulating operations and management messages having a pre-defined format in data packets to exchange said messages in b. and c.

15. A computer readable medium, containing computer readable instructions, that when loaded into a computing device comprising a network interface for interconnection with a packet switched data network, adapts said computing device to:

- a. establish a connection with a telephony switch over said packet switched data network ;
- b. form at least one packet comprising:
  - i. a network address identifying said telephony switch on said packet switched network;
  - ii. a network address identifying said computing device;
  - iii. a first message type identifier, identifying said packet as at least partially containing a data request message;
  - iv. a second message type identifier, identifying a type of operations and management data requested from said telephony switch;
- c. forward said at least one packet from said computing device to said telephony switch using said data network.

16. A computing device, comprising  
  
a processor;

a data network interface, in communication with said processor;

processor readable memory, comprising processor readable instructions, adapting said device to:

- a. establish a connection with a telephony switch over a packet switched data network in communication with said network interface;
- b. form at least one packet comprising:
  - i. a network address identifying said telephony switch on said packet switched network;
  - ii. a network address identifying said computing device;
  - iii. a first message type identifier, identifying said packet as at least partially containing a data request message;
  - iv. a second message type identifier, identifying a type of operations and management data requested from said telephony switch;
- c. forward said at least one packet from said computing device to said telephony switch using said data network interface.

*a* <sup>17.</sup><sub>16</sub> A digital telephony switch, comprising  
a processor;  
a data network interface, in communication with said processor;

processor readable memory, comprising processor readable instructions, adapting said switch to:

a) in response to a request for operations and management data, form at least one data packet comprising:

- i. a network address identifying said telephony switch on a packet switched network in communication with said network interface;
  - ii. a network address identifying said computing device;
  - iii. a first message type identifier, identifying said packet as at least partially containing a message formed in response to a request;
  - iv. a second message type identifier, identifying a type of operations and management data provided by in said packet;
- b. forward said packet from said telephony switch to said computing device using said data network interface.